

Interpon[®]
powder coatings

EVERY COLOR IS GREEN



AkzoNobel

Interpon F: Powder coating technology for furniture



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Powder coating technology - dedicated design for furniture

AkzoNobel Powder Coatings are proud to present the global powder coatings offer, Interpon F, designed specifically to meet the high performance and aesthetic demands of the furniture industry.

Leading Global Expertise

We understand the world of furniture design strives to combine the essentials of aesthetics with tough performance criteria, for both interior and exterior environments. Our global expertise and leadership in Powder Coatings, means we are ideally placed to help you choose the highest quality products, performing to industry specifications, with a wide range of dedicated colors and finishes.

Interpon F Assurance

- **Design driven products**
- **Global support**
- **Quality consistency**
- **An Eco-efficient solution**
- **Onsite technical support**



‘We are ideally placed to help you choose the highest quality products’



Perfect for any designer looking to protect the color of their furniture

The Interpon F range includes the following products.

Interpon F Product	Environment	Substrate	Property	Application/End use
Metal				
Interpon F 1000	Indoor	Metal	Interpon F 1000 specification	Office/school furniture, household, shop fittings
Interpon F 1500	Outdoor	Metal	Interpon F 1500 specification	Garden, playground, street/park furniture
Interpon F Durable	Outdoor	Metal	See related specification	Special waranteed outdoor furniture, stadium seating
Special Interpon powder coating				
Interpon PZ Primer	Indoor/Outdoor	Metal	Anti-corrosion for steel	Stadium, playground, durable garden furniture
Interpon EC	Indoor/Outdoor	Metal	Easy clean and anti-graffiti	White board, hospital; street furniture
Interpon AM	Indoor/Outdoor	Metal	Anti-microbial	Hospital, food preparation area
Interpon STF Primer	Indoor/Outdoor	Metal	Heat transfer sublimation	Decorative household and garden furniture
Non-metal				
Interpon F	Indoor	MDF	See product information on page 10	Office, children, playground furniture, garage cabinet
Interpon F	Indoor/Outdoor	Ceramic		Flower pot, ceramic ware, tile etc
Interpon F	Indoor/Outdoor	Glass		Glass bottle and flat glass surfaces

Powder coatings

Traditionally Interpon F Powder Coatings can be applied to metal substrates - carbon steel, zinc, galvanized steel, cast and extruded aluminum. We are now able to coat a range of different substrates - turn to page 10 for more details.

Interpon F 1000 Interior

Interpon F 1000 is suitable for interior furniture, such as office or school furniture, household, hospital and lab furniture and shop fittings.

Interpon F 1500 boasts excellent appearance with good heat stability and resistance to ultraviolet rays for items exposed to sunlight through a window.

It also displays good mechanical and physical performance as well as chemical resistance.

Interpon F 1500 Interior

Interpon F 1000 is suitable for garden, playground, stadium, street and park furniture. Ideal for outdoor environments as well as interior applications, Interpon F1500 offers excellent resistance to UV exposure and superior heat stability.

Interpon F Durable Exterior

Perfect for stadium seating, furniture exposed to extreme environments and outdoor furniture requiring a special guarantee.

Interpon F Durable Exterior protects with superior durability in external environments and offers superb anti-corrosion properties.



Interpon F 1000 interior furniture coating specification

Interpon F 1000 powder coatings offer first class performance for interior furniture and offer increased scratch resistance and hardness when compared with regular powder coatings.

Test	ASTM Test reference	F1000	ISO Test reference	F1000
Physical				
Impact (steel only)	ASTM D2794/93 2004 Forward/Reverse(in-lbs)	80/80	ISO6272-2:2002 Forward/Reverse	80/80
	ASTM D2794/93 2004 Forward/Reverse(Joules)	9/9		9/9
Pencil hardness	ASTM D3363/05 - Scratch (Certified Pencils)	1H-2H	ISO 15184:1998	1H-2H
Abrasion resistance	ASTM D4060/01, mg weight loss, 1000 cycles	<60	ISO 7784-2:1997	<60
Solvent resistance	ASTM D4752-10 (Stain rating)	Max 3/5	N/A	N/A
Stain resistance	ASTM D1308-02 (Stain rating)	Max 1.5	ISO 2812-4:2007	Max 1.5



Interpon F

test methods under ASTM & ISO

Test	ASTM Test reference	Result evaluation criteria					
Physical							
Impact (steel only)	ASTM D2794/93-2004	Forward/Reverse rating in in/lbs (NA) and Joules (Europe/Asia)					
Pencil hardness	ASTM D3363-05 - Scratch	Mitsubishi Certified Pencils, Hardness Scale rating					
Abrasion resistance	ASTM D4060-10, CS-10 Wheel, 1kg load	Mg weight loss after 1000 cycles					
Solvent resistance	ASTM D4752-10	Stain Rating on painted surface vs rubbing cloth Solvent used: Methyl Ethyl Ketone (MEK) – 50 double rubs					
		Rating	Paint surface	Residue on cloth			
		5	No change	None			
		4	Burnished appearance in rubbed area	Slight amount of zinc			
		3	Some marring and apparent depression				
		2	Heavy marring, obvious depression				
Solvent resistance	ASTM D1308-02(07)	Stain rating based on extent of staining					
		Rating	Extent of stain				
		0	Unchanged – no perceptible change				
		1	Very slight – just perceptible change				
		2	Slight – clearly perceptible change				
		3	Moderate – very clearly perceptible change				
		4	Considerable – pronounced change				
		5	Very marked change				
		Stains used - Distilled Water hot and cold, 50% Ethyl Alcohol, Vinegar (3% acetic acid), Alkali Solution(1M NaOH), Acid Solution(1M HCl), Soap Solution, Detergent Solution, Fruit Juice, Oils and fats, Mustard, Ketchup, Coffee, Tea, Cocoa					
		Durability					
QUV	ASTM G154-06, UVA 340	Hours at which 50% of 60deg gloss is retained					
	Irradiation: 8hrs, 0.89W/M2, 60°C; Condensation: 4hrs, 50°C	Max Delta E					
	ASTM G53-93, UVB-313	Hours at which 50% of 60deg gloss is retained					
	Irradiation: 4hrs, 0.75W/M2, 50°C; Condensation: 4hrs, 40°C	Max Delta E					
Salt Spray	ASTM B117-09	Creep rating after 480hrs & 1000hrs					
		mm creep	Rating	mm creep	rating	mm creep	Rating
		0	10	2.0-3.00	6	10.0-13.0	2
		1-0.5	9	3.0-5.0	5	13.0-16.0	1
		0.5-1.0	8	5.0-7.0	4	>16.0	0
Constant humidity	ASTM D1735-08	Visual assessment after 1000hrs					
		Delta E Measurement					
		Max gloss Change @60 degree					

ISO Test reference	Result evaluation criteria	ASTM vs ISO					
ISO 6272-2:2002	Forward/Reverse rating in in/lbs (NA) and Joules (Europe/Asia)	Same					
ISO 15184:1998	Mitsubishi Certified Pencils, Hardness Scale rating	Same					
ISO 7784-2:1997	Mg weight loss after 1000 cycles	Same					
N/A	N/A	N/A					
ISO 2812-4:2007	Stain rating based on extent of staining		Same				
	Rating	Extent of stain					
	0	Unchanged – no perceptible change					
	1	Very slight – just perceptible change					
	2	Slight – clearly perceptible change					
	3	Moderate – very clearly perceptible change					
	4	Considerable – pronounced change					
5	Very marked change	Same					
Stains used - Distilled Water hot and cold, 50% Ethyl Alcohol, Vinegar (3% acetic acid), Alkali Solution(1M NaOH), Acid Solution(1M HCl), Soap Solution, Detergent Solution, Fruit Juice, Oils and fats, Mustard, Ketchup, Coffee, Tea, Cocoa							
ISO 11507:2007	Hours at which 50% of 60deg gloss is retained	Similar					
	Max Delta E						
ISO 11507:2007	Hours at which 50% of 60deg gloss is retained						
	Max Delta E						
ISO 9227:2006	Creep rating after 480hrs & 1000hrs						Similar
	mm creep	Rating	mm creep	Rating	mm creep	Rating	
	0	10	2.0-3.0	6	10.0-13.0	2	
	0-0.5	9	3.0-5.0	5	13.0-16.0	1	
	0.5-1.0	8	5.0-7.0	4	>16.0	0	
1.0-2.0	7	7.0-10.0	3				
ISO 6270-1:2005	Visual assessment after 1000hrs						Similar
	Delta E Measurement						
	Max gloss Change @60 degree						

Interpon F 1500 exterior furniture coating specification

Interpon F 1500 coatings offer superb durability, designed with the exterior furniture market in mind and offer increased scratch resistance and hardness. The Interpon F 1500 range offers the same interior performance as Interpon F 1000, but with superior exterior durability.



Test	ASTM Test reference	F1500	ISO Test reference	F1500
Physical				
Impact (steel only)	ASTM D2794/93 2004 Forward/Reverse (in-lbs)	80/80	ISO6272-2:2002 Forward/Reverse	80/80
	ASTM D2794/93 2004 Forward/Reverse(Joules)	9/9		9/9
Pencil hardness	ASTM D3363/05 - Scratch (Certified Pencils)	1H-2H	ISO 15184:1998	1H-2H
Abrasion resistance	ASTM D4060/01, mg weight loss, 1000 cycles	<60	ISO 7784-2:1997	<60
Solvent resistance	ASTM D4752-10 (Stain rating)	3/5	N/A	N/A
Stain resistance	ASTM D1308-02 (Stain rating)	Max 1.5	ISO 2812-4:2007	Max 1.5
Durability				
QUV	ASTM G154-06, UVA-340 (50% Gloss Ret'n @60deg)	>500hrs	ISO 11507:2007	>500hrs
	ASTM G154-06, UVA 340 (Max DE)	<5		<5
	ASTM G53-93, UVB-313 (50% Gloss Ret'n @60deg)	>200hrs	ISO 11507:2007	>200hrs
	ASTM G53-93, UVB-313 (Max DE)	<5		<5
Salt spray	ASTM B117:09, Creep Rating after 480hrs	Min Rating >5	ISO9227:2006	Min Rating >5
Constant Humidity	ASTM D1735-08 (1000 hrs)	No blistering, darkening or delamination	ISO 6270-2:2005	No blistering, darkening or delamination
	Max DE	<3	Max DE	<3
	Max gloss change @60 degree	10	Max gloss change @60 degree	10

Special powder coatings

The varied surfaces of furniture today often present difficult performance challenges: heat, harsh chemicals, microbes, graffiti and high UV to name but a few. Interpon F powder coatings provide a package of unique capabilities, specially designed to meet these challenges.

Interpon PZ primer

Epoxy powder coatings rich in Zinc which have been developed to enhance the corrosion protection of a steel substrate. It is recommended for use with an Interpon F 1500 top coat as a two coat system, providing excellent anti-corrosion protection for outdoor furniture.

Interpon EC

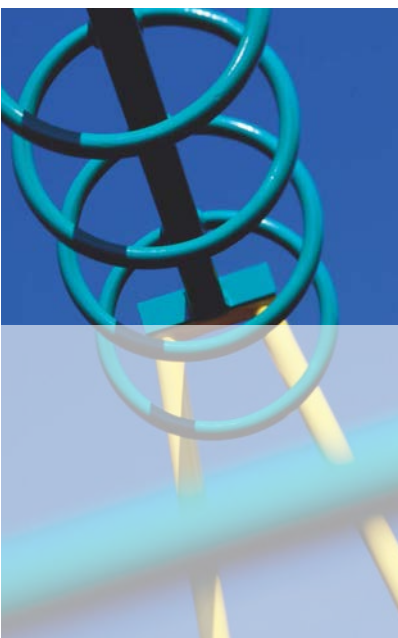
A high quality powder which is resistant to most inks and paint. It allows graffiti to be removed easily with special solvent and cleaner. The very film properties that allow graffiti to be removed easily also impart high levels of scratch, abrasion and UV resistance.

Interpon AM

A high quality powder coating which combines the decorative and protective qualities of powder coatings with an active antimicrobial agent bound into the product during manufacture. These coatings have regularly tested to international standard ISO 22196:2007 and have demonstrated efficacy levels of >99% against a wide range of microbes.

Interpon STF primer

Heat transfer is the process of transferring a pattern printed on a film onto powder coating primer under the effect of temperature. AkzoNobel has established itself as a pioneer of this technology. The process provides designers scope for 3-dimensional decoration on furniture parts with a variety of effects including wood grain, marble and granite.



Non metal substrates

At AkzoNobel Powder Coatings innovation is our key driver. We are constantly looking for new and exciting ways to make your product stand out. The Interpon F range can also provide powder technology and support for coating other interesting substrates.

MDF

These coatings can be used on MDF (Medium Density Fibreboard), Plywood and certain types of natural wood.

It's a simplified process with low environmental impact when compared to liquid. There are two types of powder coating - low-bake powders, which cure under lower than normal temperatures required for metal; and UV powders which cure under ultra-violet light and produce a harder and smoother finish.

Ceramic

Can be used on fired clay. These powders are cost efficient and environmental friendly. Not only is it a great innovation from the traditional ceramic finishing process, the technology also provides more color varieties and choices.

Glass

Exciting powder coatings which achieve a frosted glass finish via a new sustainable process. The powder used on the surface is only one coat. Compared to traditional glass treatment, it is simpler and creates less waste.

For more information please contact your customer service representative.



Color and Finish

Think color, think furniture, think Interpon F. Working closely with globally renowned color experts and the AkzoNobel Aesthetics center, the Interpon F range offers a superb selection of colors and finishes.

The Interpon F trend range

The Trend range consists of the latest colors and finishes put together by our globally renowned color experts and the AkzoNobel Aesthetics Center. These colors are seen as the most up to date for the furniture industry and are updated annually.

The Interpon F tool kit

The complete collection of various powder finishes including chrome effect, anodized, soft touch, hand painted, STF and many more.

The Interpon F standards

AkzoNobel Powder Coatings also offer a wide range of RAL standards and NCS colors. What's more, powder can be color matched to your own personal requirements.

Color Expertise

The AkzoNobel Aesthetic center are at the forefront of global color trend forecasting. Our color expert, Mr. Per Nimer, is a world renowned leader in predicting color trends and translating them into 'must have' color ranges for the furniture industry.

For more information, please contact your local customer service representative.



For more information on the extensive **Interpon F** range speak to your AkzoNobel Powder Coatings representative or visit our website at www.interpon.com

With worldwide manufacturing and supply capability, Interpon F ensures consistent, quality coatings on a global scale.

Local Websites

Australia

www.interpon.com.au

China

www.interpon.cn

Colombia

www.interpon.com.co

Czech Republic Slovak Republic

www.interpon.cz

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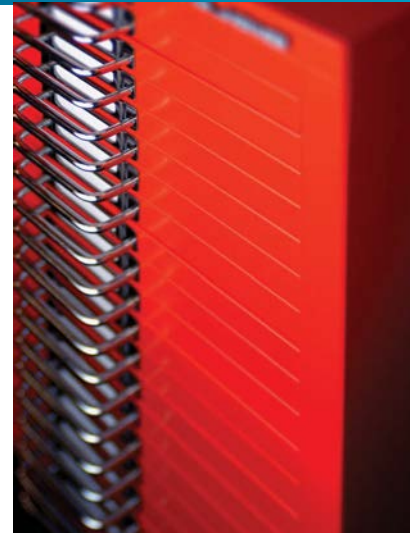
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